## Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

To:

Sonia Vega

From:

Brad Taylor

Date:

June 14, 1995

Subject:

Murrell Residence and Murrell Landfill EMERGENCY RESPONSE

US EPA RECORDS CENTER REGION 5

In response to activities conducted by Ecology and Environment at the Murrell Residence and Landfill a couple questions remain unanswered. The first question is whether an observed release to the Sangamon River has occurred? The second question is whether the site is impacting residents through soil exposure? The site has been investigated under CERCLA authority by Ecology and Environment in 1990, and Black and Veech in 1991 and again in 1993 in the form of a Screening Site Inspection Report. Finally the site was reviewed again by E & E Inc. in 1995 in the form of a Focused Site Inspection.

Under the surface water pathway, the site was scored as a potential to release hazardous materials to the Sangamon River. A major downfall of past CERCLA investigations is the lack of sediment samples at the confluence of the intermittent stream with the Sangamon River (this being the Probable Point of Entry). One sample was collected within the intermittent stream on-site which revealed arsenic at a lower concentration than what was found onsite. This suggests that hazardous materials are migrating away from the property toward the Sangamon River. Because there were no sediments collected at the PPE a release to the Sangamon River, which is considered a fishery, could not be determined. The one sediment sample obtained showed an arsenic concentration of 6 ppm, although no background was collected to compare results. If arsenic was found at the PPE at level II concentrations this would contribute to the overall score and perhaps be enough to reach a overall site score above 28.5.

The cover letter of the FSIP, June 8, 1995, mentioned that E & E Inc. was tasked only to score the Murrell Landfill site although information from the Murrell Residence was included. The scoring packages from Black and Veech in 1993 emphasized soil exposure, whereas E & E in 1995 stressed groundwater.

B & V (1993) Ground water 6.93

Surface W. 1.75 Soil Exp. 63.33

Air Mig. 2.05

Score 31.89 E & E (1995) Ground water 31.79 Surface W. 1.00 Soil Exp. 0.61 Air 0.00 Score 15.90

Although soil exposure did not receive much emphasis in E & E scoring, there remain two residents on areas of observed contamination according to B & V report.

In conclusion, appears that arsenic would enter the Sangamon River via the intermittent stream. Due to the lack of environmental samples which could prove or disprove an observed release, I do not agree with a no further action planned (NFRAP) decision.

Should you have any questions please contact me at 217-524-1660.

Sincerely,

Brad Taylor

Bradtaylor



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PRESORTED FIEST CLASS



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Attention Ms. Sonia Vega